Searching PAJ Page 1 of 1

## PATENT ABSTRACTS OF JAPAN

(11)Publication number: 2003-246780 (43)Date of publication of application: 02.09.2003

(51)Int.Cl.

CO7D237/34 CO7D401/04 // A61K 31/502 A61P 9/10 A61P 15/10 A61P 43/00

(21)Application number: 2002-355624 (22)Date of filing:

06.12.2002

(71)Applicant : EISAI CO LTD

(72)Inventor: ABE SHINYA

KOMATSU TAKEKI SHIMOMURA NAOYUKI FURUKAWA TAKESHI YOSHIZAWA KAZUHIRO

(30)Priority

Priority number : 2001383733 Priority date: 17.12.2001 Priority country: JP

## (54) METHOD FOR MANUFACTURING AROMATIC RING COMPOUND CONTAINING NITROGEN (57)Abstract:

PROBLEM TO BE SOLVED: To provide a useful method for manufacturing such an aromatic ring derivative containing nitrogen as a phthalazine derivative, a quinazoline derivative or the like which is useful as a cyclic GMPphosphodiesterases inhibitor or the like.

SOLUTION: The method for manufacturing a compound (1e) indicated in formula (1e) (In the formula, R2 is a 1-6C alkyl group, or the like R1 is a halogen atom, a cyano group or the like. R3 is a 6-14C aryl 1-6C alkyl group which may have a substituent or the like. Y2 and Z2 are each independently a methine group substituted by a nitrogen atom or 4hydroxypiperidine-1-yl group or the like), a salt thereof or their hydrates comprises using a compound (1b) indicated in formula (1b) (In the formula, R2 is a 1-6C alkyl group or the like. R1, R3 are the same as defined before. Y and Z are each independently a methine group substituted by a nitrogen atom or a halogen atom) as a raw material or an intermediate.